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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,611	01/28/2004	Travis Swanson	DB001096-000	3432
57694	7590	02/07/2008		
JONES DAY 500 GRANT STREET SUITE 3100 PITTSBURGH, PA 15219-2502			EXAMINER CHUNG, PHUNG M	
			ART UNIT 2117	PAPER NUMBER
			MAIL DATE 02/07/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/766,611	Applicant(s) SWANSON ET AL.	
	Examiner Phung My Chung	Art Unit 2117	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/23/04 and 7/23/07</u> . | 6) <input type="checkbox"/> Other: ____  |

### ***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-25 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 3, 7-10, 12, 14 and 16-30 of copending Application No. 10/766,386. Although the conflicting claims are not identical, they are not patentably distinct from each other because all limitation of the rejected claims are claimed in at least one of the claims 3, 7-10, 12, 14 and 16-30 of applicant's copending application, some limitation of the instant application is wording differently from limitation of the copending application but have the same meaning, for example, "simultaneously" which is the same as "concurrently" and there is no reason why the rejected claims could not have been presented in the copending application 10/766,386.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Drawings***

3. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the method claims, for example, "selecting at least one of a plurality of signals...;

further selecting...other than said selected bit line;

Storing said plurality of signals...;

Transferring said plurality of signals stored...;

performing said selecting and further selecting...;

simultaneously transmitting...;

repeating said transmitting...;

performing a data write/read operations...;

performing reading of data...;

configuring said delay locked loop...;

determining a duration of said delay...;

changing an operating condition...;

repeating said transmitting, simultaneously transmitting, and performing with said changed operating condition present" these method step should have a flow chart or flow diagram or these method steps should be deleted from the claims.

Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new

drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

## **INFORMATION ON HOW TO EFFECT DRAWING CHANGES**

### **Replacement Drawing Sheets**

Drawing changes must be made by presenting replacement sheets which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments section, or remarks, section of the amendment paper. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). A replacement sheet must include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and within the top margin.

### **Annotated Drawing Sheets**

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheet(s) must be clearly labeled as "Annotated Sheet" and must be presented in the amendment or remarks section that explains the change(s) to the drawings.

### **Timing of Corrections**

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-25 are rejected under 35 U.S.C. 101 because claims 1-15 and 20-25 do not have any useful result and claims 16-19 do not have any useful test result.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-9, 20 and 23-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Silvestri (6,385,129).

Claims 20 and 23-25, Silvestri discloses a system comprising:

A memory chip (505);

A bus (511, 512) having a plurality of bit lines; and

A processor (502) connected to the memory chip via the bus and a

communication therewith through the bus, wherein the processor is configured to perform the following:

Select a first group of bit lines from the bus to carry a first plurality of data patterns;

Select at least one of the remaining bit lines from the bus not within the first group to carry a second plurality of data patterns;

Transmit the first plurality of data patterns on the first group of bit lines a selected one of the plurality of bit lines in the bus, and

Transmit the second plurality of data patterns on the at least one of the remaining bit lines one or more of the plurality of bit lines other than the selected bit line. These function are inherent in the system of Silvestri. (See Fig. 5, col. 5, lines 57-67 to col. 6, lines 1-3).

8. As per claims 1-6, 7-9, these claims are rejected under similar rationale as set forth in claims 20 and 23-25.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 10-19 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silvestri (6,385,129) in view of Enstrom (5,530,895).

As per claims 21-22, the teaching of Silvestri has been discussed above. Silvestri does not specifically disclose perform a data write/read operation at one of the plurality of storage locations using the bus after each bit in the first and the second plurality of data patterns is transmitted on respective bit lines in the bus. However, Enstrom does disclose disclose perform a data write/read operation at one of the plurality of storage locations using the bus after each bit in the first and the second plurality of data patterns is transmitted on respective bit lines in the bus. (Col. 2, lines 18-88 and col. 5, line 62 to col. 6, line 12). Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to incorporate the step of performing a data write/read operation at one of the plurality of storage locations using the bus after each bit in the first and the second plurality of data patterns is transmitted on respective bit lines in the bus as taught by Enstrom into the invention of Silvestri so that data read out from the memory can be check for errors.

As per claims 10 and 16-18, these claims are rejected under similar rationale as set forth in claim 20-22.



As per claims 11-14 and 19, Silvestri further discloses a strobe signal received from a delay locked loop DLL; Configuring the delay locked loop to provide a delay to the strobe signal so as to enable latching of the data. (See col. 1, lines 16-25).

As per claim 15, Silvestri and Enstrom do not disclose changing a operating condition of the memory, wherein the operating condition includes one or more of a supply voltage, a reference voltage and temperature, and repeating the transmitting steps and performing with the changed operating condition present. However, it would have been obvious design choice to a person of ordinary skill in the art, at the time the invention was made, to change an operating condition of the memory, wherein the operating condition includes one or more of a supply voltage, a reference voltage and temperature, and repeating the transmitting steps and performing with the changed operating condition present so that during these operations, DLL can be monitored to observe its behavior due to changes in the power supply caused by the operation or due to changes in operating conditions such as voltage or temperature, or both.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phung My Chung whose telephone number is 571-272-3818. The examiner can normally be reached on Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques can be reached on 571-272-6962. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Phung My Chung  
Primary Patent Examiner  
Art Unit 2117